

Dynasytan® SILBOND® H-5

Ethyl polysilicates

Technical Data

Properties and test methods	Unit	Value
Physical Form	-	Clear Liquid
Density (20 °C)	g/cm ³	0.940
Viscosity (20 °C)	mPa·s / cSt	5.0
BoilingPoint	°C / °F	78 / 172
Flash Point	°C / °F	13 / 56
Silica Content (as SiO ₂)	% by wt min	19.5

Dynasytan® SILBOND® H-5 is a clear, low-viscosity pre-hydrolyzed ethyl polysilicate binder that has been designed for the precision investment casting industry. It contains a higher percentage (approximately 19.5%) silica content (as SiO₂) and a lower acidity level than Dynasytan® SILBOND® H-4. It is well suited for use in block-casting applications.

Safety and handling

Before considering the use of Dynasytan® SILBOND® products please read its Safety Data Sheet (SDS) thoroughly for safety and toxicological data as well as for information on proper transportation, storage and use. The Safety Data Sheet is available after registration on our website www.dynasytan.com or upon request from your local representative, customer service or from Evonik Resource Efficiency GmbH, Product Safety Department, E-MAIL sds-hu@evonik.com.

Packaging, storage and shelf life

Dynasytan® SILBOND® H-5 could be available in pails, drums, totes, and tanker quantities.

In the unopened container Dynasytan® SILBOND® H-5 has a shelf life of min. 6 months from date of manufacture.

Please ask us for further details.

Properties and applications

Dynasylan® SILBOND® H-5 can be used, as delivered, to make ceramic molds for the Precision Investment Casting industry.

The degree of hydrolysis and acidity have been optimized for the required reactivity and sufficient storage stability.

The hydrolysis and condensation has been started during the production of the binder. Through a shift in the pH this process is accelerated. This shift is achieved by addition of fillers, pigments, additive, or through the evaporation of solvent or exposure to atmospheric moisture. The resulting silicic acid gel cures rapidly at ambient temperatures in air. The process of curing can be accelerated through the addition of alkali catalysts.

This information and any recommendations, technical or otherwise, are presented in good faith and believed to be correct as of the date prepared. Recipients of this information and recommendations must make their own determination as to its suitability for their purposes. In no event shall Evonik assume liability for damages or losses of any kind or nature that result from the use of or reliance upon this information and recommendations. EVONIK EXPRESSLY DISCLAIMS ANY REPRESENTATIONS AND WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, AS TO THE ACCURACY, COMPLETENESS, NON-INFRINGEMENT, MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE (EVEN IF EVONIK IS AWARE OF SUCH PURPOSE) WITH RESPECT TO ANY INFORMATION AND RECOMMENDATIONS PROVIDED. Reference to any trade names used by other companies is neither a recommendation nor an endorsement of the corresponding product, and does not imply that similar products could not be used. Evonik reserves the right to make any changes to the information and/or recommendations at any time, without prior or subsequent notice.

Europe/Middle-East/Africa/RoW

Evonik Resource Efficiency GmbH

Business Line Silanes
Rodenbacher Chaussee 4
63457 Hanau-Wolfgang
Germany
PHONE +49 6181 59 13636
FAX +49 6181 59 713915
dynasylan@evonik.com
www.dynasylan.com

Asia / Pacific

Evonik (SEA) Pte. Ltd.

Business Line Silanes
3 Internatioanl Business Park
#07-18, Nordic European Centre
Singapore 609927
PHONE +65 6809 6576
FAX +65 6809 6699
dynasylan@evonik.com
www.dynasylan.com

Asia / Pacific

Evonik Japan Co. Ltd

Business Line Silanes
12th Floor Monolith Building
2-3-1, Nishi-Shinjuku-ku
Tokyo 163-0912
Japan
PHONE +81 353 23 7446
FAX +81 353 23 7397
dynasylan@evonik.com
www.dynasylan.com

North America

Evonik Corporation

Business Line Silanes
299 Jefferson Road
Parsippany, NJ 07054-0677
USA
PHONE (TOLL FREE) +1 800 237 67 45
PHONE +1 973 929 8513
FAX +1 973 929 8503
dynasylan@evonik.com
www.dynasylan.com

Asia / Pacific

Evonik Specialty Chemicals (Shanghai) Co. Ltd.

Business Line Silanes
55, Chungdong Road
Xinzhuang Industry Park
Shanghai 201108
P.R. China
PHONE +86 21 61191-399
FAX +86 21 61191-648
dynasylan@evonik.com
www.dynasylan.com

Asia / Pacific

Evonik India Pvt. Ltd.

Business Line Silanes
Krislon House
Saki Vihar Road, Anderi (E)
Mumbai - 400 072
India
PHONE +91 226 7238 809
FAX +91 226 7238 811
dynasylan@evonik.com
www.dynasylan.com

North America

Silbond Corporation

9901 Sand Creek Highway
Weston, MI 49289
USA
PHONE +1 517 436 9316
FAX +1 517 436 3148
dynasylan@evonik.com
www.dynasylan.com

Asia / Pacific

Evonik Korea Ltd.

Business Line Silanes
94, Galsan 1-dong
Bupyeong-gu
Incheon, 403-081
Korea
PHONE +82 2320 4773
FAX +82 2783 2520
dynasylan@evonik.com
www.dynasylan.com

Latin America

Evonik Brasil Ltda.

Business Line Silanes
Alameda Campinas, 579
01404-000 São Paulo-SP
Brazil
PHONE +55 11 3146 4123
FAX +55 11 3146 4148
dynasylan@evonik.com
www.dynasylan.com

Asia / Pacific

Evonik Taiwan Ltd.

Business Line Silanes
Artist Construction Bldg.
9F, No. 133
Min Sheng East Road, Sec 3
Taipei, 105 Taiwan, R.O.C.
Taiwan 10596
PHONE +886 227 17 1242
FAX +886 227 17 2106
dynasylan@evonik.com
www.dynasylan.com